

AMENDMENT TO CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application.

1-9. (Canceled)

10. (Currently Amended) A method for reducing the growth of a bone, comprising:

positioning at least one electrode near the growth plate of the bone;

providing a power source and controller in electrical communication with the at least one electrode, wherein the power source generates bone growth reducing current and the controller regulates the amount of the current applied to the at least one electrode;

applying bone growth reducing electrical current to at least a portion of the growth plate of a bone through the at least one electrode, wherein the current is effective to reduce the growth of the bone in the applied region; and

monitoring the change in growth of the bone.

11. (Original) The method of claim 10 wherein the bone growth reducing electrical current is effective to arrest the growth of the bone in the applied region.

12. (Original) The method of claim 10 wherein the bone growth reducing electrical current is effective to arrest the growth of the entire bone.

13. (Original) The method of claim 10 further comprising positioning at least one electrode near the growth plate of the bone, wherein the bone growth reducing electrical current is applied to the growth plate through the at least one electrode.

14. (Canceled)

15. (Currently Amended) The method of claim 44 10 further comprising:
determining an amount of correction for the bone; and
removing the power source when the amount of correction has been achieved.

16. (Original) The method of claim 10 wherein the bone growth reducing electrical current is at least 50 μ A.

17. (Original) The method of claim 13 wherein the at least one electrode is positioned in the growth plate.

18. (Previously Presented) A method for correcting the curvature of the spine, comprising the steps of:

- positioning at least one electrode at a portion of a vertebrae near the outside curve of the spine;
- applying a bone growth reducing current to the portion of the vertebrae, wherein the current is effective to reduce the growth of the vertebrae at the outside of the curve without reducing growth of the vertebrae near the inside of the curve;
- determining the amount of correction for the curvature of the spine;
- monitoring the change in curvature of the spine; and
- removing the at least one electrode from the vertebrae when the amount of correction for the curvature of the spine has been achieved.

19. (Canceled)

20. (Previously Presented) The method of claim 18, further comprising the steps of:

- positioning at least two electrodes on the portion of vertebrae along the outside curve of the spine; and
- providing a power source and controller in electrical communication with the at least two electrodes, wherein the power source generates the bone growth reducing current and the controller regulates the amount of the current applied to each of the at least one electrode.

21. (Original) The method of claim 20 wherein the controller regulates the frequency and duration of the current applied to each of the at least two electrodes.

22. (Original) The method of claim 20 wherein the amount of current applied to two or more electrodes is different.

23. (Original) The method of claim 20 further comprising the step of:
programming the controller to apply the amount, frequency, and duration of the current to each of the at least two electrodes.

24. (Previously Presented) The method of claim 18 further comprising the steps of:
providing at least one second electrode on a portion of the vertebrae along the inside of the curve of the spine; and
applying a bone growth stimulating current to the at least one electrode.

25. (Original) The method of claim 18 wherein the at least one electrode is positioned in a growth plate.

26. (Original) The method of claim 18 wherein the at least one electrode is positioned near a growth plate.

27. (Canceled)

28. (Previously Presented) The method of claim 22 wherein the current delivered to one of the electrodes is at least 50 μ A and the current delivered to another one of the electrodes is 35 μ A.

29. (Previously Presented) The method of claim 24 wherein the bone growth reducing current is at least 50 μ A and the bone growth stimulating current is under 20 μ A.

30. (Previously Presented) The method of claim 18 wherein the vertebrae is located at substantially the apex of the curve.

31. (Previously Presented) The method of claim 30, further comprising the step of:
positioning at least one electrode in a first vertebra disposed adjacent to the vertebrae at the apex of the curve such that the at least one electrode in the first vertebra is positioned at a portion of the first vertebra near the outside of the curve.

32. (Previously Presented) A method for correcting the curvature of the spine, comprising the steps of:

positioning at least one electrode at a portion of vertebrae substantially near the apex of an outside curve of the spine;

applying a bone growth reducing current to the portion of the vertebrae, wherein the current is effective to reduce the growth of the vertebrae at the outside of the curve without reducing growth of the vertebrae near the inside of the curve;

positioning at least one electrode in a first vertebra disposed adjacent to the vertebrae at the apex of the curve such that the at least one electrode in the first vertebra is positioned at a portion of the first vertebra near the outside of the curve;

positioning at least one electrode in a second vertebra disposed adjacent to the vertebrae at the apex of the curve such that the at least one electrode in the second vertebra is positioned at a portion of the second vertebra near the outside of the curve.

33. (Previously Presented) The method of claim 32, further comprising the step of:
applying more current to the portion of the vertebrae at the apex of the curve than to at least one of the first vertebra and the second vertebra.

34. (Previously Presented) The method of claim 10, wherein the bone continues to grow in a region where the current is not applied.

35. (Previously Presented) The method of claim 10 wherein the current is at least 35 μA .

36. (Canceled)

37. (Currently Amended) The method of claim 10 wherein said step of applying bone growth reducing electrical current comprises applying bone growth reducing electrical current through ~~with~~ at least one electrode that is positioned in a growth plate.

38. (Canceled)

39. (Previously Presented) The method of claim 31, further comprising the step of:

positioning at least one electrode in a second vertebra disposed adjacent to the vertebra at the apex of the curve such that the at least one electrode in the second vertebra is positioned at a portion of the second vertebra near the outside of the curve.

40. (Previously Presented) The method of claim 39, further comprising the step of:

applying more current to the vertebrae at the apex of the curve than to at least one of the first vertebra and the second vertebra.